

ABSTRACT

In a one-dimensional IP (vertical disparity discarding system), it is made possible to obtain a perspective projection image with no distortion or reduced distortion. A stereoscopic display device is provided with a display device including a display plane in which pixels are arranged flatly in a matrix shape; and a parallax barrier including a plurality of apertures or a plurality of lenses and being configured to control directions of rays from the pixels such that a horizontal disparity is included but a vertical disparity is not included. A horizontal direction pitch of the parallax barrier is integer times a horizontal pitch of the pixels, the display plane of the display device is divided so as to correspond to elemental images for respective apertures or the lenses of the parallax barrier, and an image whose vertical direction corresponds to a perspective projection in a fixed viewing distance and whose horizontal direction corresponds to an orthographic projection is divided and arranged for respective columns of the pixels.